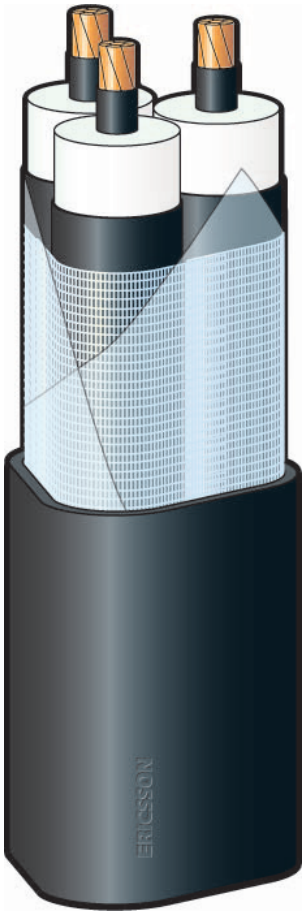
FXCEL 12/20(24) kV 3x16/10

Product Information



Application
Self suspending 3-core cable, for use as aerial cable on poles, and in the ground and water.

Standards
IEC 60502-2
HD 620 S2:2010 Part 10 Section M

Conductor
Copper, hard drawn, circular, stranded.
Nominal cross sectional area: 16 mm².
Diameter, nominal: 4.7 mm.

Inner conductive layer
Extruded PE

Insulation
XLPE, Triple extruded, dry cured vulcanized.
Nominal thickness: 5.5 mm
Diameter over insulation approx. 17.0 mm

Outer conductive layer
Extruded PE, easy strippable

Screen
Band of woven copper threads.
Nominal cross sectional area, 10mm²

Tape
PETP-PE tape

Sheath
Black LLD PE Nominal thickness: 2.6 mm
Outer diameter: 40 mm
Outer circumscribed circle diameter: 43 mm
Weight: 1.4 kg/m
Density: 1.3 kg/dm3

Embossed
”ERICSSON AB AC3 FXCEL 12/20(24) kV 3x16/10 (Year of manufacturing YYYY)”
+ meter marked

Technical data

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Electrical

Number of conductors x cross sectional area (mm^2)	3x16/10		
Rated voltage U_0/U_M	12/20(24) kV		
Rated current according to IEC287		In air 25 ºC	In the ground 15 ºC
maximum conductor temperature	65 ºC	85 A	94 A
	90 ºC	105 A	105 A
as self supporting suspending cable	65 ºC	85 A	-
Conductor resistance max. at 20 ºC	1.15 Ω/km		
Inductance	0.48 mH/km		
Capacitance	0.11 µF/km		
Earth fault current	1.25 A/km		
Max. short circuit current (1 sec.) at 250 ºC end conductor temp.	3.0 kA		
Max. short circuit current, for the screen	2.0 kA		

Installation

Minimum bending radius	
at laying, approx.	450 mm
at fixed position, approx.	350 mm
Min. temp. at laying approx.	-20 ºC

Data for calculation in pole-setting systems (see handbook)

Area	55 mm^2
Diameter	40 mm
Q_c, Cable weight	1.4 kg/m
E_{ik}, Elasticity-modulus initial, before ice load	78 000 N/mm^2
E_p, Elasticity-modulus after permanent creeping, (after ice load)	98 000 N/mm^2
τ_p, Permanent elongation or creeping	0.5 %
Coefficient of linear expansion per ºC	18 x 10^{-6}
Definitude strain 0 ºC	80 N/mm^2
Maximum force on cable in calculations	11 kN
Approximate fast break load for cable	>25 kN
Approximate long term break load for cable	>17 kN

We reserve the right for alterations due to continual product development and/or changes in standards.

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